REMARKS

Applicant respectfully requests reconsideration in view of the amendment and following remarks. The applicant has amended the specification as requested by the Examiner at page 6 of the Office Action and corrected the obvious typographical error.

Claims 35, 36, 38, 39, 41-47, 49-52, 55, and 56 were rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. Claims 35, 36, 44, 45, 49-52, and 55 were rejected under 35 U.S.C. 102(a) as being anticipated by WO 97/05529 ("WO '529"), as evidenced by applicant's admission at page 21 of the instant specification and the American Chemical Society (ACS) File Registry No. 361391-57-3. Claim 38 was rejected under 35 U.S.C. 103(a) as being unpatentable over WO '529 patent, as evidenced by applicant's admission at page 21 of the instant specification and the American Chemical Society (ACS) File Registry No. 361391-57-3, as applied to claim 35 above. Claims 39 and 41 were rejected under 35 U.S.C. 103(a) as being unpatentable over WO '529 patent, as evidenced by applicant's admission at page 21 of the instant specification and the ACS File Registry No. 361391-57-3, as applied to claim 35 above, further in view of additional teachings in WO '529 patent. Claims 41-43 were rejected under 35 U.S.C. 103(a) as being unpatentable over WO '529 patent, as evidenced by applicant's admission at page 21 of the instant specification and the ACS File Registry No. 361391-57-3, as applied to claim 35 above, further in view of additional teachings in WO '529 patent. Claims 46 and 47 were rejected under 35 U.S.C. 103(a) as being unpatentable over WO '529 patent, as evidenced by applicant's admission at page 21 of the instant specification and the ACS File Registry No. 361391-57-3, as applied to claim 35 above,

combined with Akimoto U.S. Patent No. 5,707,772 ("Akimoto"). Claims 53 and 56 were rejected under 35 U.S.C. 103(a) as being unpatentable over WO '529 patent, as evidenced by applicant's admission at page 21 of the instant specification and Diamond, *Handbook of Imaging Materials*, pages 227 and 234, combined with Odell U.S. Patent No. 5,487,965 ("Odell"). The applicant respectfully traverses these rejections.

112 First Paragraph Rejection

Claims 35, 36, 38, 39, 41-47, 49-52, 55, and 56 were rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The Examiner asserted that the instant specification does not define the standard DIN 53461-B. The Examiner also asserted that the instant specification does not disclose the conditions and criteria used in the standard to determine the HDT, nor does it disclose the date or version of DIN 53461-B that was relied on in the specification. Again, the appropriate revision of the DIN 53461 would be the one that was currently in use at the time of the filing of the application (revised January 1987). If the applicant would have wanted the earlier 1969 revision, the specification would have stated that.

As the Examiner has suggested at the bottom of page 5 to the top of page 6 of the Office Action, the applicant has enclosed an executed Declaration from Dr. Klaus Berger, an expert in the toner art that establishes that the DIN 53461-B was the January 1987 revision. For the above reasons, this rejection should be withdrawn.

Rejections Over WO '529

Claims 35, 36, 44, 45, 49-52, and 55 were rejected under 35 U.S.C. 102(a) as being anticipated by WO '529, as evidenced by applicant's admission at page 21 of the instant specification and the American Chemical Society (ACS) File Registry No. 361391-57-3. Claim 38 was rejected under 35 U.S.C. 103(a) as being unpatentable over WO '529 patent, as evidenced by applicant's admission at page 21 of the instant specification and the American Chemical Society (ACS) File Registry No. 361391-57-3, as applied to claim 35 above. Claims 39 and 41 were rejected under 35 U.S.C. 103(a) as being unpatentable over WO '529 patent, as evidenced by applicant's admission at page 21 of the instant specification and the ACS File Registry No. 361391-57-3, as applied to claim 35 above, further in view of additional teachings in WO '529 patent. Claims 41-43 were rejected under 35 U.S.C. 103(a) as being unpatentable over WO '529 patent, as evidenced by applicant's admission at page 21 of the instant specification and the ACS File Registry No. 361391-57-3, as applied to claim 35 above, further in view of additional teachings in WO '529 patent. Claims 46 and 47 were rejected under 35 U.S.C. 103(a) as being unpatentable over WO '529 patent, as evidenced by applicant's admission at page 21 of the instant specification and the ACS File Registry No. 361391-57-3, as applied to claim 35 above, combined with Akimoto U.S. Patent No. 5,707,772 ("Akimoto"). Claims 53 and 56 were rejected under 35 U.S.C. 103(a) as being unpatentable over WO '529 patent, as evidenced by applicant's admission at page 21 of the instant specification and Diamond, *Handbook of Imaging Materials*, pages 227 and 234, combined with Odell.

The applicant has submitted a certified English translation of the priority document H*-348546 filed December 26, 1996 in Japan. Support in the certified priority document for each of the claims is shown in the Appendix 1. Claims 52 and 53 are discussed below.

The Examiner asserted that claim 52 was anticipated by WO '529, as evidenced by applicant's admission at page 21 of the instant specification and the American Chemical Society (ACS) File Registry No. 361391-57-3. For claim 52, paragraph no. 8 of the translation supports cyclohexene and norbornene. It is noted that tetracyclododecene and dicyclopentadiene are not disclosed in this section. However, WO '529 only discloses cyclohexene and norbornene and does not disclose tetracyclododecene and dicyclopentadiene (see page 6 the last paragraph of the English translation of WO '529). Therefore, the applicant has properly antedated WO '529 with respect to claim 52.

Claims 53 and 56 were rejected under 35 U.S.C. 103(a) as being unpatentable over WO '529 patent, as evidenced by applicant's admission at page 21 of the instant specification and Diamond, *Handbook of Imaging Materials*, pages 227 and 234, combined with Odell. Support for claim 53 is shown in Appendix 1. Although there is not literal support for the complete range, the translation does supply support (see Appendix 1). Example 30 provides an embodiment that supports claim 53. The applicant believes that the translation supplies enough support to antedate WO '529. For the above reasons, this rejection should be withdrawn.

The applicant believes that the claims are supported by the priority document and therefore, the applicant has antedated WO '529 and all the rejections should be withdrawn.

In view of the above, applicant believes the pending application is in condition for allowance.

A two month extension fee has been paid. Applicant believes no fee is due with this response. However, if a fee is due, please charge our Deposit Account No. 03-2775, under Order No. 05587-00343-US from which the undersigned is authorized to draw.

Respectfully submitted,

By _____

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Enclosure: Two month extension of time
Certified English translation of priority document
Declaration
Appendix 1

APPENDIX 1

35. A toner for developing an electrostatically charged image, the toner comprising

(a) a binder resin comprised of at least one polyolefin resin having a cyclic structure, wherein the polyolefin resin having a cyclic structure comprises: **[see for example, claim 1 of the translation of the priority document and paragraph no. 0007]**

(i) a first resin or a first resin fraction with a number average molecular weight (Mn), as measured by GPC, of less than 7,500, **[see for example, claim 1 of the translation of the priority document and paragraph no. 0007]**

and

(ii) a second resin or a second resin fraction with a number average molecular weight (Mn) of 7,500 or more, Mw of 15,000 or more, a heat distortion temperature as measured by the DIN 53461-B method of 70 °C or higher and an intrinsic viscosity of 0.25dl/g or more; **[see for example, claim 1 of the translation of the priority document and paragraph no. 0007]**

a colorant; **[see for example, claim 1 of priority document]**

(c) a function imparting agent; **[see for example, claim 1 of priority document]**

and

(d) a charge control agent **[see for example, claim 1 of priority document]**

and

wherein said first resin or said first resin fraction and said second resin or said second resin fraction must be present and said second resin or second resin fraction is contained in a proportion of less than 50% by weight based on the entire binder resin. **[see for example, claim 1 of priority document]**

36. The toner for developing an electrostatically charged image as claimed in claim 35, wherein the binder resin consists of 1 to 100 parts by weight of the polyolefin resin having a cyclic structure, and 99 to 0 parts by weight of a resin selected from the group consisting of

(a) a polyester resin,

(b) an epoxy resin,

(c) a polyolefin resin,

(d) a vinyl acetate resin,

(e) a vinyl acetate copolymer resin,

(f) an acrylate resin,

(g) a styrene-acrylate resin and

mixtures of (a) –(g). **[see for example, claim 2 of priority document]**

38. The toner for developing an electrostatically charged image as claimed in claim 35, wherein the polyolefin resin having a cyclic structure has at least one polar functional group selected from the group consisting of a carboxyl group, a hydroxyl group and an amino group. **[see for example, claim 3 of priority document]**

39. (Previously presented) The toner for developing an electrostatically charged image as claimed in claim 35, wherein the polyolefin resin having a cyclic structure has at least one carboxyl group introduced therein having uniformly dispersed therein fine particles of a metal thereby forming an ionomer having crosslinked structure. **[see for example, paragraph no. 24 of the translation]**

41. (Previously presented) The toner for developing an electrostatically charged image as claimed in claim 35, wherein the polyolefin resin having a cyclic structure has a crosslinked structure. **[see for example, paragraph no. 23 of the translation]**

42. (Previously presented) The toner for developing an electrostatically charged image as claimed in claim 41, wherein the polyolefin resin having a cyclic structure has a structure crosslinked by a diene wherein the crosslinked structure is obtained by the reaction of

(a) a diene monomer

with (b) an acyclic olefin and (c) a cycloolefin. **[see for example, paragraph no. 23 of the translation]**

43. (Previously presented) The toner for developing an electrostatically charged image as claimed in claim 42, wherein the diene monomer is selected from the group consisting of

norbornadiene and cyclohexadiene. **[see for example, paragraph no. 23 of the translation]**

44. (Previously presented) The toner for developing an electrostatically charged image as claimed in claim 35, wherein the imparting agent is at least one polar wax. **[see for example, paragraph no. 25 of the translation]**

45. (Previously presented) The toner for developing an electrostatically charged image as claimed in claim 44, wherein said at least one polar wax is selected from the group consisting of amide wax, carnauba wax, higher fatty acids and esters thereof, higher fatty acid metallic soaps, partially saponified higher fatty acid esters and higher aliphatic alcohols. **[see for example, claim 6 of the translation]**

46. (Previously presented) The toner for developing an electrostatically charged image as claimed in claim 35, wherein at least one nonpolar wax is used as the function imparting agent. **[see for example, paragraph no. 25 of the translation]**

47. (Previously presented) The toner for developing an electrostatically charged image as claimed in claim 46, wherein said at least one nonpolar wax is selected from the group consisting of polyolefin wax and paraffin wax. **[see for example, paragraph no. 25 of the translation]**

48. (Previously presented) A toner for developing an electrostatically charged image, the toner comprising

(a) a binder resin comprised of at least one polyolefin resin having a cyclic structure comprising at least three different resins or resin fractions having molecular weight ranges expressed by number average molecular weight (Mn), as measured by GPC, **[see for example, claim 6 of the translation]**

(i) of less than 7500 which is a first resin or first resin fraction,

(ii) 7500 or more but less than 25,000, Mw of 15,000 or more, and an intrinsic viscosity of 0.25dl/g or more which is a second resin or second resin fraction, and

(iii) 25,000 or more, Mw of 15,000 or more, and an intrinsic viscosity of 0.25dl/g or more which is also part of the third resin or the third resin fraction, **[see for example, claim 6 of the translation for the description of (i)-(iii)]**

and wherein said first resin or said first resin fraction and said second resin or said second resin fraction and the third resin or third resin fraction must be present and said second resin and third resin or second resin fraction and third resin fraction are contained in a proportion of less than 50% by weight based on the entire binder resin, **[see for example, claims 1 and 6 of the translation]**

(b) a colorant; **[see for example, claim 1 of the translation]**

(c) a function imparting agent; **[see for example, claim 1 of the translation]** and

a charge control agent. **[see for example, claim 1 of the translation]**

49. (Previously presented) A toner for developing an electrostatically charged image, the toner comprising:

(a) a binder resin comprised of at least one polyolefin resin having a cyclic structure, wherein the polyolefin resin having a cyclic structure comprises: **[see for example, claim 1 of the translation]**

(i) a first resin or a first resin fraction with a number average molecular weight (Mn), as measured by GPC, of less than 7,500, **[see for example, claim 1 and examples 20, 24 and 27 which only require the use of of a resin or resin fraction with a Mn of less than 7500 (sample 1 Mn = 3350; sample 3 Mn = 3400 and sample 5 Mn = 3900]**

and

optionally (ii) a second resin or a second resin fraction with a number average molecular weight (Mn) of 7,500 or more, Mw of 15,000 or more, a heat distortion temperature as measured by the DIN 53461-B method of 70 °C or higher and an intrinsic viscosity of 0.25dl/g or more; **[see for example, claim 1 for the features and examples 20, 24 and 27 which only require the use of a resin or resin fraction with a Mn of less than 7500 and the other resin Mn of 7500 or more is optional]**

(b) a colorant; **[see for example, claim 1 of the translation]**

(c) a function imparting agent; **[see for example, claim 1 of the translation]**

and

(d) a charge control agent, **[see for example, claim 1 of the translation]**

wherein said second resin or said second resin fraction is contained in a proportion of less than 50% by weight based on the entire binder resin. **[see for example, claim 1 of the translation]**

50. (Previously presented) The toner for developing an electrostatically charged image as claimed in claim 49, wherein said second resin or said second resin fraction is present and said polyolefin resin having a cyclic structure is a copolymer of an acyclic olefin and a cycloolefin compound having at least one double bond. **[see for example, paragraph no. 8 of the translation]**

51. (Previously presented) The toner for developing an electrostatically charged image as claimed in claim 50, wherein the acyclic olefin is present and is an alpha-olefin selected from the group consisting of ethylene, propylene and butylene. **[see for example, paragraph no. 8 of the translation]**

52. (Previously presented) The toner for developing an electrostatically charged image as claimed in claim 51, wherein the cycloolefin compound having at least one double bond is present and is selected from the group consisting of cyclohexene, norbornene, tetracyclododecene and dicyclopentadiene. **[see for example, paragraph no. 8 of the translation for support for cyclohexene and norbornene. It is noted that tetracyclododecene and dicyclopentadiene are not disclosed in this section]**

53. (Previously presented) A liquid dried system containing 30% by weight to 50% by weight of a dried polymerized system containing 0.5% by weight to 5% by weight of a charge control agent, 1% by weight to 10% by weight of wax, 0.1% by weight to 2% by weight of aerosol silica, 1% by weight to 10% by weight of pigment and 85% by weight to 95% by weight of a binder resin, wherein the binder resin comprises a polyolefin resin having a cyclic structure wherein the polyolefin resin having a cyclic structure comprises a resin or a resin fraction with a number average molecular weight (Mn), as measured by GPC, of less than 7,500; **[see for example, the table in paragraph no. 0005 at page 4 of the translation discloses 50-100% binder resin, 0-20 % colorant, 0-10% charge control agent and 0 to 20% function imparting agent. In addition, paragraph no. 0031 under the heading of toner preparation method 3 which discloses a dry polymerized system containing 1% by weight of a charge control agent, 4% by weight of wax, 0.5 % by weight**

of aerosol silica and 5% of a pigment and 89.5% by weight binder. Further support is shown in test method 4 at paragraph 0032 which shows 40% by weight of the toner obtained by using the formulation of the dry polymerized system of toner preparation of method 3 obtained using the formulation of Examples 1-8 discloses samples 1, 3,and 5 made by the method 3. Samples 1, 3 and 5 have Mn between 3350 and 3900 which is less than 7500. This is an embodiment within the scope of the claim

and 50% by weight to 70% by weight of a carrier liquid. **[see for example, toner preparation method 4 which uses 60%**

54. (Cancelled)

55. (Previously presented) The toner as claimed in claim 35, wherein said second resin or said second resin fraction is present in amount from 18.8% to less than 50% by weight based on the entire binder resin. **[see for example, example 30 of the translation for the lower limit 7.4 / (7.4 + 8 + 24) = 18.8% and claim 1 for the higher limit]**

56. (Previously presented) The system as claimed in claim 53, wherein said polyolefin resin further comprises a second resin or a second resin fraction with a number average molecular weight (Mn) of 7,500 or more, Mw of 15,000 or more, a heat distortion temperature as measured

by the DIN 53461-B method of 70 °C or higher and an intrinsic viscosity of 0.25dl/g or more; and second resin or second resin fraction is less than 50% by weight of the entire binder resin.

[see for example, claim 1 for the features]